ORIGINAL VIDEO IN

11

YC / VIDEO BUFFER — 12

CLAMP — 13

INPUT BUFFER — 14

LUMA / CHROMA SEPARATOR — 15

LUMA AMP — 16

CHROMA AMP — 17

ENHANCE SHAPER — 18

SUM AMP — 19

OUTPUT AMP — 20

Y OUTPUT — 21

C OUTPUT — 22

SYNC SEPARATOR — 23

HORIZ BLANKING MULTIVIBRATOR — 24

CPLD VERTICAL DECODER — 25

HORIZONTAL WIPE GENERATOR — 26

MACROVISION CONTROL GENERATOR — 27

PROCESSED VIDEO OUT — 28

Y VIDEO OUT — 29

C VIDEO OUT — 30

FIG. 1

FIG. 2

FIG. 3

FIELD 1

VTRIG (MR)

←64H

Q5 70H →

Q6 23H →

Q7 70H →

Q8 132H →

Q9

VERTICAL BLANKING (VBLNK) 20 H LINES

CLOCK (HBLANK)

BURST GATE (BGATE) 9 LINES FIELD 1

BURST GATE (BGATE) 8.5 LINES FIELD 2

MACROVISION GATE (MVGATE) 11 LINES

VERTICAL DISPLAY WINDOW (VWIN)

V WINDOW START 67 H LINES

V WINDOW 145 H LINES (60% ACTIVE PICTURE TIME)   REMAINDER

NCRAL   START 247 LINES   UP CRAWL DELETE

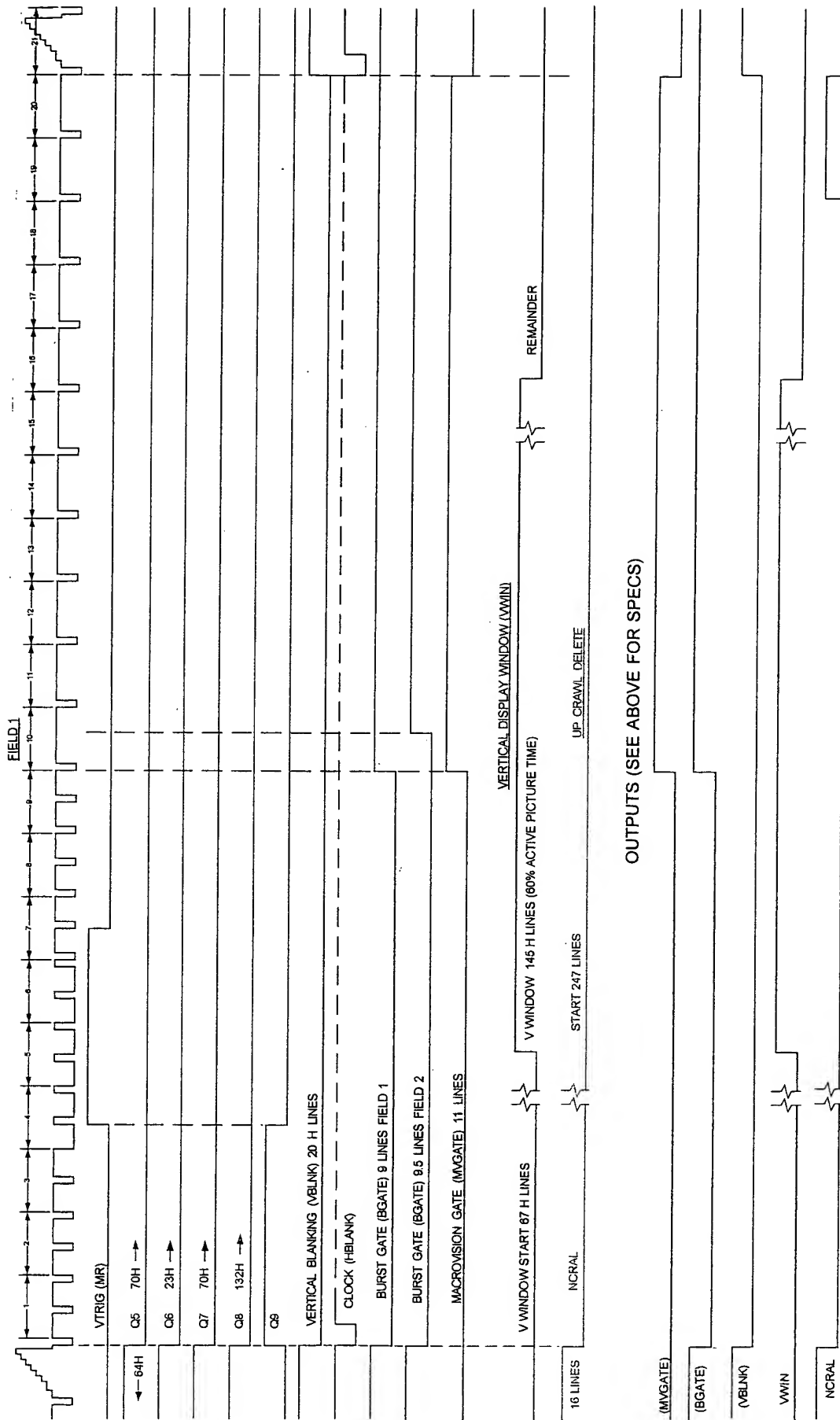16 LINES

OUTPUTS (SEE ABOVE FOR SPECS)

(MVGATE)

(BGATE)

(VBLNK)

VWIN

NCRAL

NOTES:
1) ALL OUTPUT ABLE TO PULLUP TO 5VDC POWER.
2) Q OUTPUT REGENERATED HORIZONTAL BLANKING LEADING EDGE CLOCKS THE VERTICAL COUNTER.
3) FOLLOWING ARE OUTPUTS: MACROVISION GATE (MVGATE), VERTICAL BLANKING (VBLNK), BURST FLAG GATE, (BFG), VERTICAL DISPLAY WINDOW (VWIN), NEWS CRAWL (NCRAL).
4) ALL OUTPUTS FREE OF DECODE SLIVERS.
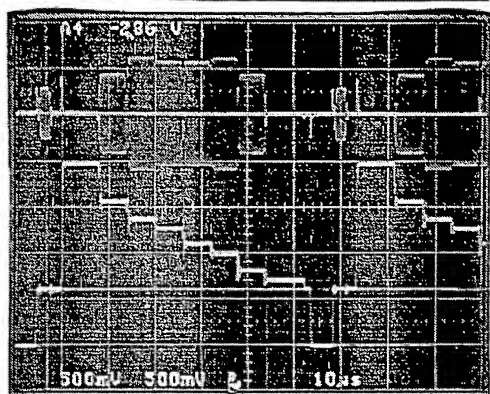
FIG. 4
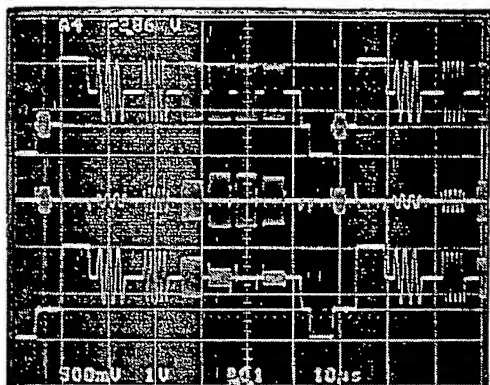
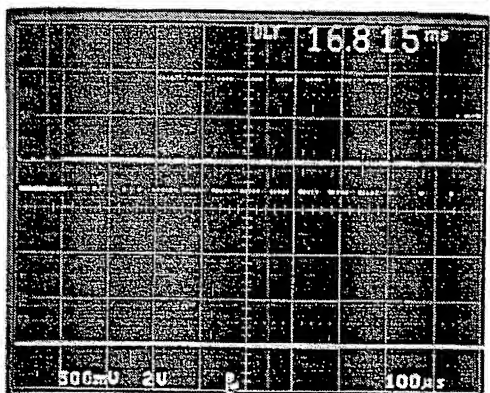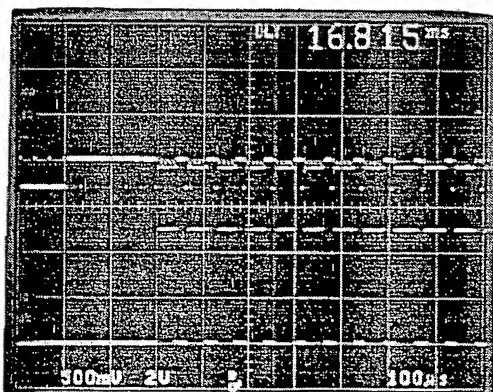VIDEO OUT
MULTIBURST

C OUT

Y OUT

FIG. 5

C OUT (COLOR BARS)
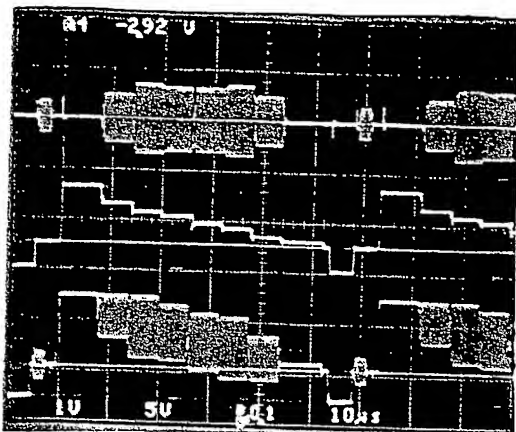
Y OUT (COLOR BARS)

VIDEO OUT
MACROVISION "ON"

MV DEL GATE
MV MODE "ON"

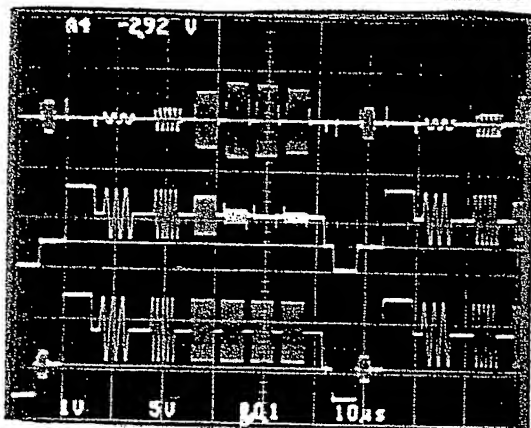VIDEO OUT
MACROVISION "OFF"

MV DEL GATE
MV MODE "OFF"

CHROMA BUFF OUT

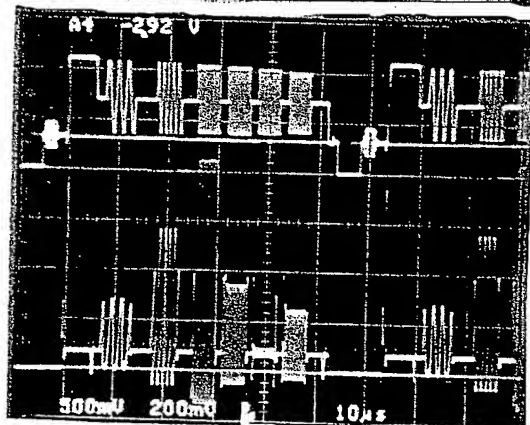LUMA BUFF OUT

COMP VIDEO IN
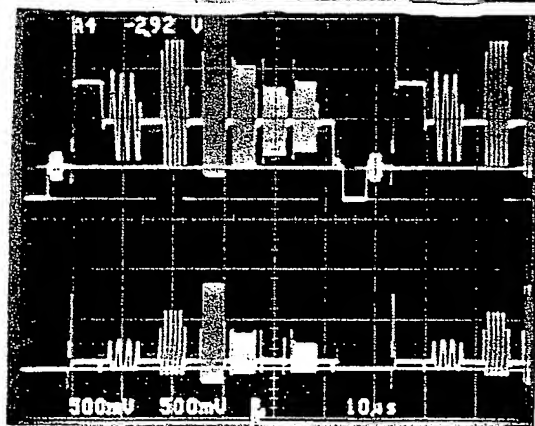COLOR BARS

FIG. 6

CHROMA BUFF OUT

LUMA BUFF OUT

COMP VIDEO IN
MULTIBURST

VIDEO OUT
NO ENHANCE

ENHANCE SHAPER OUT

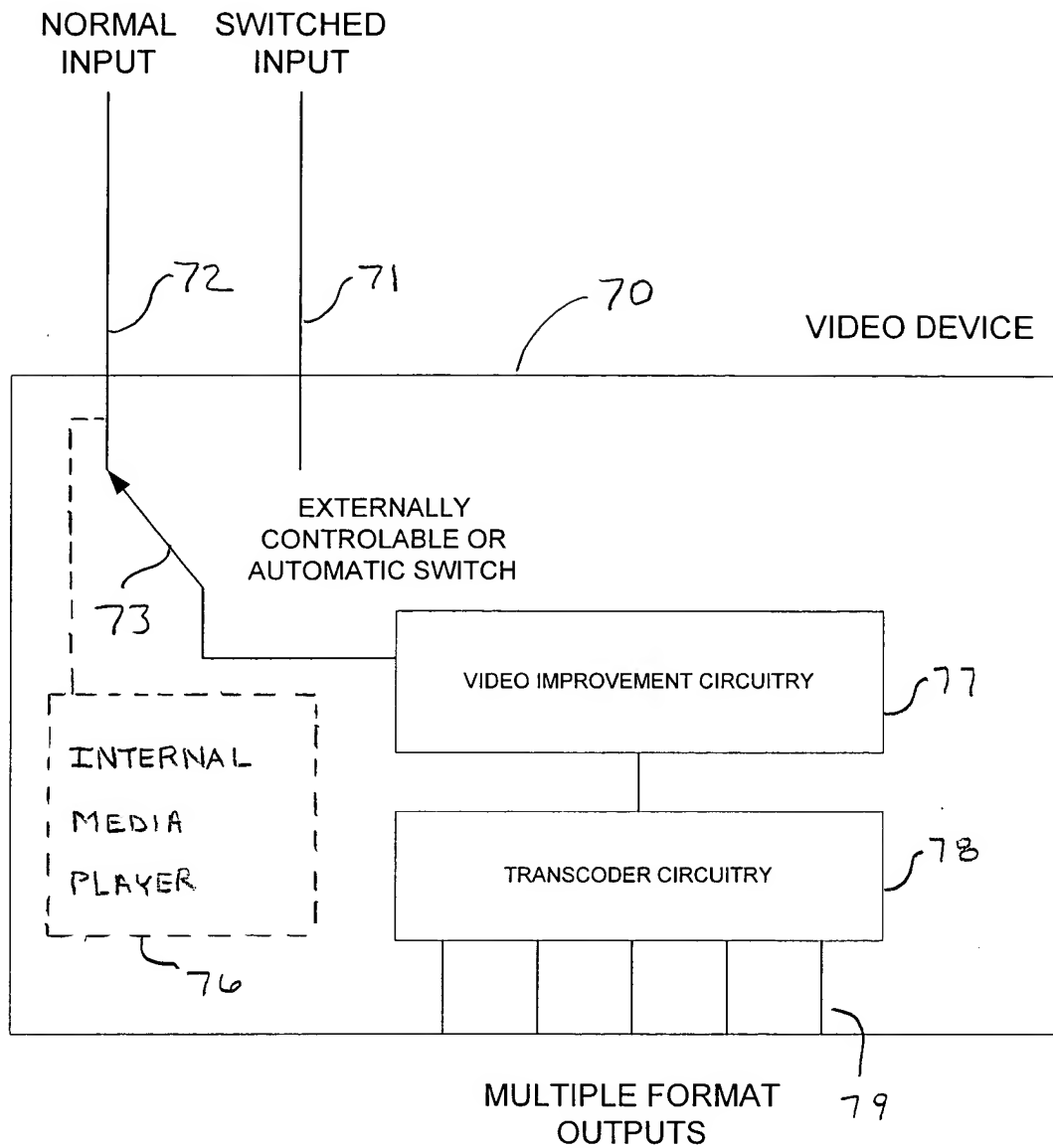VIDEO OUT
MAX ENHANCE

ENHANCE SHAPER OUT

NORMAL SWITCHED
INPUT INPUT

72 71 70

VIDEO DEVICE

EXTERNALLY
CONTROLABLE OR
AUTOMATIC SWITCH

73

INTERNAL
MEDIA
PLAYER

VIDEO IMPROVEMENT CIRCUITRY 77

TRANSCODER CIRCUITRY 78

76

MULTIPLE FORMAT 79
OUTPUTS

FIG. 7